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ABSTRACT

This report presents a description and the results of evaluation of Project Adelante at William H. Taft High School in New York City during 1980-81. The project, which was funded under Title VII of the Elementary Secondary Education Act, provided instruction in English as a Second Language, Spanish language skills, and bilingual instruction in science, mathematics, and social studies to high school students of limited English proficiency. Included in the report are descriptions of the ethnic composition, population characteristics, and socioeconomic conditions of the area in which the school is located; an enumeration of student characteristics; and discussions of program philosophy, organization, funding, goals/objectives, student placement procedures, instructional offerings, curriculum and materials, supportive services, staff development, and parental involvement. Participating students' self-concepts are also examined. The program evaluation covers the evaluation procedures: findings on the extent of students' English language development; growth in mastery of Spanish; achievement in mathematics, social studies, and science; and data on attendance. Recommendations for program improvement are presented. (Author/MJL)

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FINAL EVALUATION REPORT

E.S.E.A. TITLE VII

Grant Number: G008006585

Project Number: 5001-56-17649

WILLIAM H. TAFT HIGH SCHOOL

PROJECT ADELANTE

1980-1981

Principal:
Ms. Lorraine Monroe

Project Director:
Mr. Dana S. Fishkin

Prepared by the
BILINGUAL EDUCATION EVALUATION UNIT

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RICHARD GUTTENBERG, ADMINISTRATOR

UD 022 247

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A SUMMARY OF THE EVALUATION
FOR PROJECT ADELANTE
WILLIAM H. TAFT HIGH SCHOOL
1980 - 1981

This program, in its first year of funding, provided instruction in E.S.L. and Spanish language skills as well as bilingual instruction in science, mathematics, and social studies to approximately 225 students of limited English proficiency in grades nine through twelve. The target population represented 15 national backgrounds and varied in educational preparedness, socioeconomic status, and length of residency in the United States.

The stated program philosophy was to expedite the acquisition of English through native- and second-language instruction. The practice of this bilingual approach varied according to each individual student's needs, resulting in highly diversified student programs. Mainstreaming decisions were guided by teachers' recommendations, student's performance in class and on tests, and student or parental request.

The instrumental goal of the project was to develop a comprehensive bilingual course of study for secondary education, to be implemented by instructional and support service personnel trained in the areas of specialization required by the target population. Further, it aimed at progressively increasing parental involvement, the percentage of students graduating, and the percentage of students continuing their education at a post-secondary level or becoming gainfully employed.

Title VII funds supported administrative and support services staff including two educational assistants. All instructional services and paraprofessional assistance were provided by tax levy and Title I personnel. Supportive services to program students consisted of personal and academic guidance, home visits, and career counseling. Development activities for staff members included enrollment in college courses, regularly scheduled department meetings and workshops, visits to other programs and resource centers, and attendance at conferences and symposia on bilingual education. Parents of participating students were involved through a Parent Advisory Committee, the adult education program, and participation in program and school-wide activities.

Students were assessed in English language development (Criterion Referenced English Syntax Test); growth in their mastery of Spanish (Interamerican Series Prueba de Lectura); mathematics, social studies, and science (teacher-made tests); and attendance (school and program records). Quantitative analysis of student achievement indicates that:

--Program students met the criterion level of one objective mastered for each month of instruction in E.S.L. except for a small group of non-Title I students, functioning on the advanced level (III), and tested only in the spring, who

failed to reach the criterion but came very close. Some of these had mastered almost all the objectives at pre-test; as a result, they could not demonstrate much growth.

--In Spanish reading, all grades demonstrated statistically and educationally significant gains.

--Seventy-eight percent of the 37 program students enrolled in mainstream mathematics courses in the fall term passed teacher-made final examinations in those courses. In spring, the overall pass rate was 54 percent.

--In bilingual mathematics classes, the overall rates of passing were 67 percent in both fall and spring. Many more students were enrolled in bilingual classes.

--In the fall, seventy-three percent of the fifteen program students enrolled in mainstream science courses passed the final examinations in those courses. In spring, 58 percent (or 11 of 19 students) passed their final exams. The numbers reported are too small to be interpreted very reliably.

--In science courses conducted in Spanish the overall pass rate was 85 percent in the fall and 71 percent in the spring.

--In mainstream social studies courses, program students achieved passing rates of 54 percent in the fall and 66 percent in the spring. Only small numbers of students were enrolled in these classes.

--In social studies courses conducted in Spanish, the overall fall pass rate was 78 percent, while it was 76 percent in spring.

--The overall attendance rate of program students exceeded the average school-wide rate by a highly significant margin.

The following recommendations are aimed at improving the overall effectiveness of the program.

--A review of the instruction provided in the content areas with an emphasis on the formation of a clearer language-use policy, the development of a program of remedial assistance for bilingual students, not highly proficient in English, who wish to take advanced academic courses, and the incorporation of students' native cultures into the social studies curriculum.

--An assessment of teachers' training needs to be followed by the appropriate in-service training workshops, teacher observation and feedback, and college course work related to bilingualism, ethnicity, class, and culture in education.

--Exploring all possible resources available for counseling including municipal, state and federally-funded service agencies as well as public and private colleges.

--The acquistion of Spanish mathematics texts at varied levels of complexity to satisfy the broad spectrum of students' ability.

--An increase in efforts to bolster parental attendance at program activities and to involve them more in their advisory function in program direction.

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PROJECT ADELANTE
WILLIAM H. TAFT HIGH SCHOOL

Location:	240 East 172nd Street - Room 251 Bronx, New York 10468
Year of Operation:	1980-1981, First year of funding
Target Language:	Spanish
Number of Students:	225
Principal:	Mrs. Lorraine Monroe
Project Director:	Mr. Dana S. Fishkin

INTRODUCTION

Project Adelante was funded for fiscal year 1980-81 as a new grant under the provision of the Elementary and Secondary Education Act - Title VII. This funding period completes the first of a three-year cycle for which the program was originally approved. Project Adelante is a basic bilingual secondary education program operating within an organizational unit of William H. Taft High School. The project offered bilingual instructional and supportive services to 225 Hispanic students of limited English proficiency (LEP) in grades 9 through 12. The project director and assistant engaged in staff development activities primarily by attending lectures, conferences, and workshops, as well as by visiting regional resource centers and other bilingual high school projects. Program teachers and paraprofessionals were trained through in-service workshops, departmental meetings, and college courses. Parents and community were involved in the project by means of a Parent/ Student Advisory Board, "open house" and sociocultural activities, and

a project newsletter. New York City Board of Education curriculum was adopted for instruction. A bilingual project-developed curriculum was used for instruction in algebra, and an American culture curriculum is now in the process of development.

The purposes of this report are:

--to describe project context, components, participants, and activities;

--to report on students' achievement and attendance;

--to analyze and interpret program and student achievement data;

--to make recommendations for program improvement.

I. CONTEXT

SITE CHARACTERISTICS

Project Adelante is housed in the William H. Taft High School building located in the central part of the Bronx. The school vicinity, where program students live, is largely residential, low-income, and partly commercial (a small-business section). During the last decade, the area has undergone a progressive decline in environmental and housing quality, as the problems of the South Bronx have extended into this vicinity. Only within the past year have construction and renovation worked some improvement in the area, with the assistance of federal funds.

The ethnic composition of the area is roughly half black American and half Hispanic. Of the Hispanics, approximately 60 percent are Puerto Rican; 30 percent are Dominican; and 10 percent are from Central and South America and the Caribbean. The population is characterized by those problems which typically afflict poor urban areas of large cities in the Northeast, such as high rates of unemployment, welfare dependence, mental and physical illnesses, drug traffic, crime, and transiency. The population is highly mobile for reasons which include: the fires which destroy many buildings in the area each year; travel to and from the country of origin; and the search for a better place to live.

The socioeconomic conditions of the community are generally associated with sociopsychological conditions manifested by program students. Staff members report that the low value placed on schooling and work by the family affects students' attendance and drop-out rates. Community agencies have provided career-orientation services; however, it may be that the aspirations and expectations of this population are

consistent with the objective social and economic reality which they experience.

Program students generally speak Spanish at home, in the neighborhood's small businesses, on the school grounds, in the school halls and classrooms. English is used for instructional purposes and for speaking with Taft students (who are predominantly black American) and mainstream faculty, who speak English only. The mixture of Spanish and English (code-switching) is the form of language which the evaluator heard most frequently in school surroundings.

Staff members noted that ethnic identity among participants is strong, particularly among the national groups who have immigrated more recently. Attendance at school events by students and parents has been highest when the activity is ethnically-related and is particular to a national group. There was no report of conflict among the national or ethnic groups represented in the community or the school.

It is interesting to note that students' good physical appearance (dress and grooming) and their respectful behavior toward authority figures have been features highlighted by staff. These characteristics are probably related to their ethnocultural backgrounds.

II. STUDENT CHARACTERISTICS

Eligibility for participation in the program is primarily determined by the students' scores on the New York City Language Assessment Battery (LAB). A score under the 21st percentile on the English part and a higher score on the Spanish is used as an indicator of eligibility. Other entry criteria include: referrals by feeder schools; results of interviews with program staff; and referrals by teachers from the English as a second language (E.S.L.) program. The program also enrolls new arrivals to the country who have settled in the vicinity. Therefore, all students are LEP to varying degrees.

Table 1 illustrates the number of students, the percentage of enrollment, and the percentage LEP according to home languages used for the school. Students whose home language is English who have been classified in Table 1 as LEP are eligible for remedial English instruction.

As can be seen in Table 1, the majority of the English dominant Taft students (most of whom speak no other language) experience academic difficulties and perform below grade level on standardized tests of reading and mathematics. In response to their problems, remedial level courses are offered in all subject areas at Taft High School.

Table 1. Home language of students in the school.

LANGUAGE	NO. OF STUDENTS	% TOTAL ENROLLMENT	% LEP
English	1,237	52.5%	80%
Spanish	1,096	46.5%	80%
Other	24	1%	80%

- English is the home language of 52.5 percent of the school population, who are mostly black American. Most of these experience academic difficulties.
- Spanish is the home language of 46.5 percent of the school population, who are Hispanic.
- Eighty percent of the Spanish and other categories is classified LEP.

Because there may be selective personal and environmental pressures on students in urban communities, the composition of the student body may vary from school to school and grade to grade within a school. In many high schools, girls outnumber boys, as they do at Taft. This disparity may be due to a number of factors which affect boys and girls differentially, including difficulties of travel to and from school, peer and parental pressures to leave school for employment or marriage.

The sex distribution of program students is 38 percent male and 62 percent female (compared with 43 percent male and 57 percent female for the school as a whole). Table 2 presents the distribution of bilingual program students by grade and sex. All bilingual program students are Hispanic, and Spanish is the language used at home. Approximately 90 percent were born outside the United States.

Table 2. Number and percentage of program students by sex and grade. (N=221)

	SEX						
	MALE		FEMALE		TOTAL		PERCENT OF
GRADE	N	%	N	%	N	%	PROGRAM POPULATION
9	28	33%	57	67%	85	100%	38%
10	30	44%	39	56%	69	100%	31%
11	19	41%	27	59%	46	100%	21%
12	7	33%	14	67%	21	100%	10%
TOTAL	84	38%	137	62%	221	100%	100%

- The student population decreases as the grade level increases from 38 percent in the ninth grade to 10 percent in the twelfth grade.
- In all grades, the percentage of female students is higher than the percentage of male students.

Table 3 indicates the number and percentage of students from each country of origin.

Table 3. Number and percentage of program students by country of origin.

COUNTRY	NUMBER	PERCENT
Puerto Rico	98	43.5
Dominican Republic	76	33.7
United States	21	9.3
Ecuador	9	4.0
Nicaragua	3	1.3
Colombia	3	1.3
Honduras	2	0.9
El Salvador	2	0.9
Cuba	2	0.9
Venezuela	2	0.9
Costa Rica	2	0.9
Guatemala	2	0.9
Panama	1	0.4
Martinique	1	0.4
Mexico	1	0.4

- The highest percentage of students (43.5 percent) was born in Puerto Rico.
- The second highest percentage (33.7 percent) was born in the Dominican Republic.
- The third highest percentage (9.3 percent) was born in the United States, most of Puerto Rican parents.
- Most of the remaining students were born in Central America.
- Percentages reflect trends in ethnic composition of the community in which the Dominican and Central American population is increasing.

Because so many of the Taft bilingual students are immigrants, their educational histories may vary considerably, as the discussion of student characteristics has indicated. Many have suffered interrupted schooling, or, because of a lack of educational opportunities in their countries of origin, have received fewer years of education than their grade level would indicate. Bilingual program students are reported by age and grade in Table 4.

Table 4. Number of students by age and grade.* (N=221)

AGE	GRADE 9	GRADE 10	GRADE 11	GRADE 12	TOTAL
14	4	2			6
15	21	2			23
16	41	16	1	1	59
17	14	30	20		64
18	4	13	16	11	44
19	1	6	9	3	19
20				6	6
TOTAL	85	69	46	21	221
% of overage students	71%	71%	54%	43%	65%

*Shaded boxes indicate the expected age range for each grade.

- 65 percent of the program students are overage for their grade.
- The percentages of overage students are higher in the ninth and tenth grades than in the upper grade levels.

As Table 4 indicates, the fact that so many students are overage may have implications for interpreting student outcomes and setting standards for expected rates of growth. These are students who have missed a year or more of school, whose grade placement may reflect their age more than their prior educational preparation. As a result they may have a lack of cognitive development in their native language which must be addressed, as it has implications for their ability to acquire oral and literacy skills in English.

In their native language students range from functionally illiterate (approximately 15, or 7 percent), through one to two years below grade level, to above grade level. Approximately 20 students (10 percent) may be said to be on grade level, and seven students (three

percent) above grade level. While students' range of proficiency in English is narrower, more perform at grade level. Their need to use English outside of school is minimal. Only a few who are more advanced in English tend to integrate socially with black American students, so most socialize in Spanish only.

According to program administrators and teachers, students manifest a great interest in their "everyday situations"; they show motivation to partake in activities and in general "feel more alive" than students in other programs and schools. Some of these have been mainstreamed to "motivated" official classes rather than to regular classes.* While few Taft bilingual students demonstrate critical academic need, most have high or moderate need. According to the family assistant, who has worked closely with the students, they have a very high need for school personnel "who care."

In general, stability of family life, and parents' income and education in their countries of origin are said to account in large measure for differences in students' needs and abilities. However, no generalizations could be made about groups according to country of origin because of the heterogeneity within each group. Most students need improvement in the content areas, study habits, and English; have a rather positive self-concept; have positive feelings toward the program; and have a strong sense of ethnic identity.

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*Selected on the basis of attendance, students in "motivated" official classes may receive additional attention from guidance personnel and other services.

III. PROGRAM DESCRIPTION

PROGRAM PHILOSOPHY

The stated program philosophy is to expedite the acquisition of English through native- and second-language instruction. Practice of this bilingual approach varies according to individual cases, with the least proficient in English receiving the most instruction in Spanish and vice versa. Mainstreaming decisions also vary according to individual students. Some students who are eligible for mainstreaming have remained in the program by choice and have been prepared to take the Scholastic Achievement Test (SAT). Mainstreaming philosophy is agreed upon by all parties involved, with the only difference existing in the interpretations of program administrators as to how soon the transition should take place. The school principal feels that it should occur as soon as possible, according to teachers' judgments, for it is they who know best when the student is ready. The principal also feels that it is the program's purpose "to maintain the vitality of the students' first culture as they are being prepared to function and compete in an English-speaking society."

Participants (particularly New York-born Puerto Rican students) and parents are amenable to mainstreaming early and their decisions are honored.

ORGANIZATION AND PERSONNEL

The program has been in operation during 1980-81 only. Its antecedents were an E.S.L. program and a few courses offered bilingually in order to comply with local and federal requirements for LEP students. Courses in E.S.L. were first offered by the English department and later

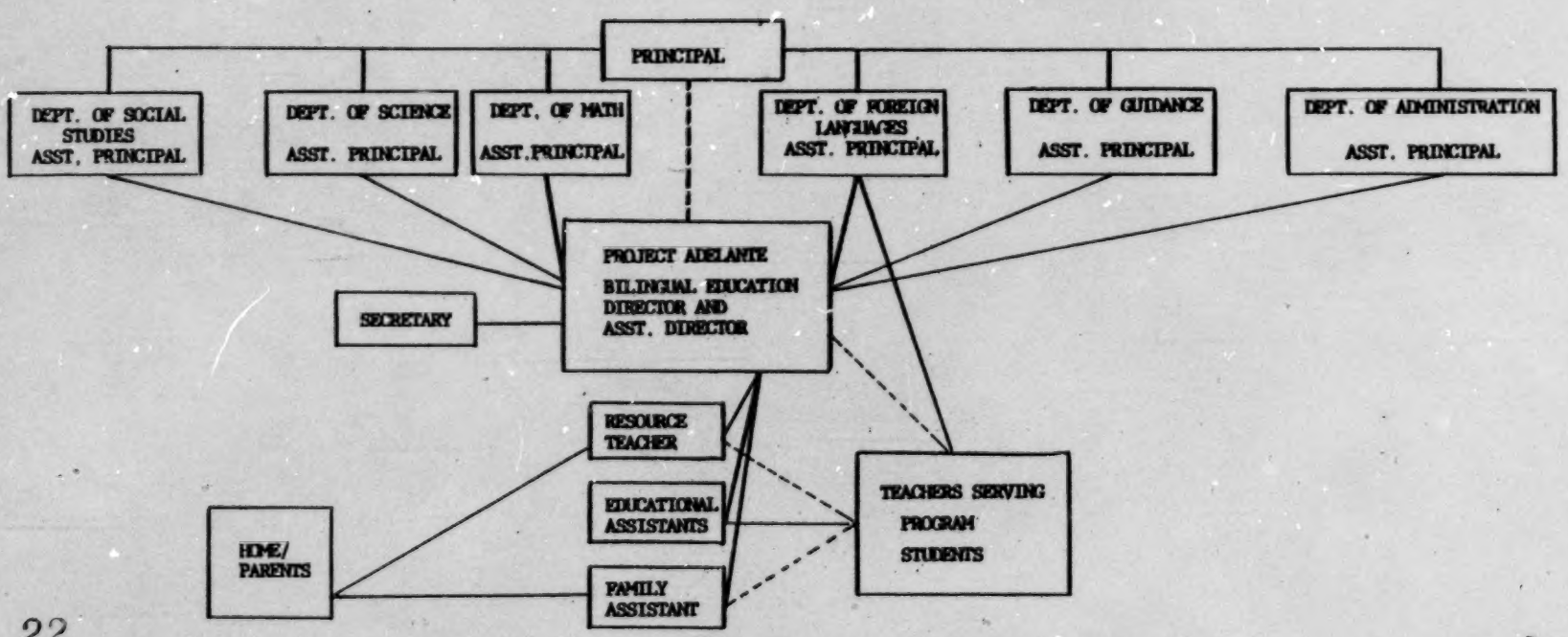
by the foreign language department. Both the present project director and his assistant had been involved with LEP students before the project began. It was through their efforts that funding for a full bilingual program was sought and obtained.

Presently the program functions under the supervision of the assistant principal for foreign languages, who oversees matters related to curriculum and instruction, and supervises staff members. The director has responsibility for the administration of all facets of the program, including instruction, training, and fiscal matters. He works not only with the assistant principal for foreign languages, but also with the assistant principals for administration, guidance, science, mathematics, and social studies. Informally, he reports directly to the principal, but does not take part in "cabinet" meetings unless matters immediately concerning the program appear on the agenda. Chart 1 locates the project within the school's organization.

The assistant director aids the director in general administration, as well as in the selection and acquisition of curriculum and materials, staff development, and supportive services. They work, in effect, as a team of co-directors. Both hold M.A. degrees in areas of education related to program needs, and are certified in educational administration. Both are certified teachers of high school Spanish in the New York City school system and have extensive experience serving bilingual populations. While neither is Hispanic in origin, both are bilingual (Spanish/English).

The resource teacher is responsible for the coordination of all testing and student activities. She organizes meetings with parents and assists in teacher-student relations. Additionally, she helps the

Chart 1. Project Adelante organization within Taft High School.



assistant director in curriculum development. She is presently working toward a master's degree in education, is certified to teach Spanish in high school by the New York City school system, has extensive experience serving bilingual students, is Hispanic, and is a native speaker of Spanish. The latter characteristic, the resource teacher feels, has contributed greatly to the effectiveness of her work with students and parents.

Two educational assistants aid teachers and provide supportive services to students. A bilingual secretary is responsible for office management, bookkeeping, and typing. All three are currently enrolled in professional development programs working toward bachelor's degrees. All have experience working with bilingual populations and are native speakers of Spanish.

The family assistant works closely with the school's guidance counselors and maintains frequent communication with the students' families. She makes contact by telephone and home visits. She works closely with the students and often functions as a counselor, responding to students' need for advice from someone within the program. She holds a high school diploma, has experience as an educational counselor of Hispanic students, and is a native speaker of Spanish.

Table 5 presents program staff characteristics for professional and paraprofessional staffs appointed to work full-time for the program.

Table 5. Program staff characteristics: professional and paraprofessional staff.

FUNCTION(S)	EDUCATION (DEGREES)	CERTIFICATION	LICENSE HELD	YEARS OF EXPERIENCE (MONOLINGUAL)	YEARS OF EXPERIENCE (BILINGUAL)	YEARS OF EXPERIENCE (E.S.L.)
Director	B.A. Spanish M.A. E.S.L. MS/PD Ed.Admin.	NYC NYS	Spanish DHS E.S.L. DHS	--	12	8
Assistant Director	B.A. Spanish MAT Spanish PD Ed. Admn.	 NYC NYS	Spanish DHS Ancillary BL DHS Soc. Studies	--	10	7
Resource Teacher	B.A. Spanish	NYC NYS	Spanish DHS	--	1	--
Secretary	Secretarial, H.S.	NYC	T.P.D. Sec. Bilingual	3	1	--
Educational Assistant	High School	NYC	---	--	6	--
Educational Assistant	High School	NYC		2	4	--
Family Assistant	High School	NYC	---	1	1	--

- The program has three professional and four paraprofessional staff members appointed to their functions full-time since the program began in September, 1980.
- All staff members hold degrees, certificates, and/or licenses necessary for their functions, and have experience serving bilingual populations.
- All staff members are bilingual (Spanish/English), one professional and four paraprofessionals are Hispanic.

FUNDING

The project combines three sources of funding: Title VII and Title I of the E.S.E.A., and tax-levy funds. Tax-levy funds support the positions of all but two teachers. Those two positions are supported by Title I, in addition to two paraprofessional positions. Title VII

supports administrative and support services staff, including one director, one assistant director, one resource teacher, one secretary, one family assistant, and two educational assistants. Tables 6 and 7 list the number of personnel and functions funded by different sources.

The allocation of funds according to functions is in agreement with the requirements of funding and fiscal (New York City Board of Education) agents.

Table 6. Funding of the instructional components.

	FUNDING SOURCE(S)	NUMBER OF PERSONNEL: TEACHERS	PARAS
E.S.L.	Title I-P.S.E.N.	2	2
Reading (Eng.)	Tax Levy	2	0
Native Language	Tax Levy	5	0
Mathematics	Tax Levy	1	2 Title VII paras shared by three subject areas
Social Studies	Tax Levy	2	
Science	Tax Levy	2	

Table 7. Funding of the non-instructional components.

	FUNDING SOURCE(S)	PERSONNEL: NO. & TITLE(S)
Administration & Supervision	Title VII	1 Director 1 Assistant Director
Curriculum Development	Title VII	1 Resource Teacher
Supportive Services	Title VII	1 Secretary 1 Family Assistant 2 Educational Assistants
Staff Development	Title VII	1 Assistant Director (cited above)
Parental and Community Involvement	Title VII	1 Family Assistant (cited above)

GOALS AND OBJECTIVES

The ultimate goal of the project is to improve the academic performance of a total of 225 Hispanic LEP students for each year of a three-year period. Its instrumental goal is to develop a comprehensive bilingual course of study for secondary education, to be implemented by instructional and support service personnel trained in the areas of specialization required by the target population. Further, it aims at progressively increasing parental involvement, the percentage of students graduating (with a diploma), and the percentage of students continuing their education at a post-secondary level or becoming gainfully employed.

Specifically, the program evaluation considers the following objectives for the 1980 period:

1. to improve achievement in English proficiency as indicated by the mastery of at least one objective per month of treatment on the Criterion Referenced English Syntax Test (CREST);

2. to increase reading achievement in Spanish as indicated by a statistically significant (α = .05) difference between pre- and post-test scores on the Cooperative Interamerican Series Prueba de Lectura;

3. to increase content-area achievement by at least 70 percent of program students to a level comparable to that of the school's non-program students as measured by department-developed examinations, and where applicable, New York City or New York State examinations translated into Spanish[1];

4. to improve the attendance rate of program students as indicated by a statistically significant (α = .05) difference between proportions of school (non-program) and program attendance.

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*It should be noted that no comparisions could be made because uniform departmental examinations in the content areas were not developed as anticipated. As a result, the objective could not be assessed as proposed.

IV. INSTRUCTIONAL COMPONENT

STUDENT PLACEMENT, PROGRAMMING, AND MAINSTREAMING

All students who meet eligibility requirements are interviewed by program staff, who make program recommmendations primarily on the basis of students' linguistic and academic ability. Instructional program design is also guided by graduation requirements, E.S.L. teacher recommendations, and students' preferences. Thus, programs are highly diversified. The higher the grade, the more variation in program.

Students are not "tracked" for instruction except in E.S.L. and reading classes, where students are grouped according to level of ability. However, grouping is flexible, allowing students to progress to more advanced groups and eventually into mainstream English courses. Teachers encourage students to work toward the goal of transition into the mainstream.

Recommendations by teachers, on the basis of performance in class and on tests, generally guide mainstreaming decisions. Other grounds for mainstreaming may be student or parental request.

At present, there is no fixed policy for language use in the classroom; in this sense, no systematic strategy has been adopted to foster transition into greater English usage within the program's content-area classes. Approximately 50 students (22 percent), mostly eleventh and twelfth graders, are taking two or more content-area courses in English. Approximately 50 students who are taking all of their content-area courses in English still retain a relationship with the program. They receive the services of the family assistant and bilingual guidance counselor, and take part in the program's extra-curricular activities, such as cultural events, contests, and assemblies.

Mainstreaming is generally viewed favorably by students and parents. Although there has been no systematic follow-up of students who were totally mainstreamed, it was reported that some students receive lower grades. In general, however, they tend to pass courses, and do not complain about difficulties in monolingual classes.

INSTRUCTIONAL OFFERINGS

The offerings are diverse in content as well as level of difficulty. There are five levels of competence in E.S.L. classes. Classes are non-graded. On the average, beginning students receive three hours of E.S.L. per day. As they progress beyond the initial level, they take two hours of E.S.L. per day. The most advanced level receives one hour of instruction per day. Table 8 outlines E.S.L. instruction.

Table 8. Instruction in English as a second language.

COURSE TITLE AND LEVEL	NUMBER OF CLASSES	AVERAGE CLASS REG.	CLASS PERIODS PER WEEK PER CLASS	DESCRIPTION	CURRICULUM OR MATERIAL IN USE
ESLND	3	23	5	Elementary E.S.L. I	Access to English I-Breckenridge
ESLNC	2	15	5	Elementary E.S.L. II	Access to English I-Breckenridge
ESLNB	2	14	5	Intermediate E.S.L. I	Lado III
ESLNA	2	19	5	Intermediate E.S.L. II	Easy Reading Selections in English-Dixon
ESLNT	1	17	5	Advanced E.S.L.	Graded Exercises in English English for Today-Dixon

Two classes of special instruction in Spanish language arts are offered to 22 students for two hours per day. These students have been identified as functional illiterates in need of intensive native language development. Several levels of Spanish language and literature are offered by the foreign language department to all other students.

A number of courses in mathematics, science, and social studies are offered in Spanish. Although there is no explicit language policy, it is estimated that the use of Spanish fluctuates from 75 to 95 percent of class time. All content-area courses taught in Spanish are considered to be "major" courses, that is, required for graduation. Their content corresponds with mainstream curriculum, and the materials used, in the students' native language, are reported by the director to be appropriate to the students' level of comprehension. (See Table 9, which follows for a listing of content-area courses.)

Table 9. Bilingual instruction in content areas.

COURSE TITLE	NUMBER OF CLASSES	AVERAGE REGISTER	% OF CLASS TIME SPANISH IS USED	HOURS PER WEEK
World Regions II	2	34	95	10
American History II	1	41	95	5
World History II	2	22	95	10
Biology II	1	24	75	10
General Science II	2	25	95	5
Concepts of Math	1	36	90	5
Pre Algebra	2	30	90	10
9 MA - Algebra I	1	25	90	5
9 MB - Algebra II	1	16	90	5

Students are enrolled in mainstream classes depending on their ability, need, choice, and graduation requirements. Table 10 shows student enrollment in these classes, which meet for five periods per week, and the criteria used to determine participation. Health education is the only mainstream class in which all program students are enrolled. Of course, more courses are offered in the mainstream than in the bilingual program. However, it is not clear to the evaluator how many program students, despite their English proficiency limitations, are enrolled in required courses in mainstream classes, because the courses are not offered in Spanish.

Twelfth graders may be placed in certain mainstream classes (economics, for example) in order to meet requirements for graduation when the equivalent class is not offered in the bilingual program. Some students, whose English skills are strong enough are registered in remedial mathematics courses in order to strengthen their mathematics skills. These students include many who were born in the United States, and whose cognitive development may not be as high as that of some of the immigrant students.

Thus, the immigrants may be taking higher level mathematics courses in Spanish while the U.S.-born and those with less well developed skills may be taking remedial courses in English. These differences may be reflected in the achievement of students in content-area classes (see the findings section).

Table 10. Mainstream classes in which program students are enrolled.

COMPONENT/SUBJECT	NUMBER OF STUDENTS	CRITERIA FOR SELECTION	OTHER COMMENTS
Health Education	225	Required	
Typing	21	Elective	
Algebra	7	Elective	
MPN (Math)	9	Remedial Math	Math Prep
RCP (Math)	47	Remedial Math	To prepare for Regents Competency Examinations
CM (Math)	12	Remedial Math	Concepts of Math
PA (Math)	16	Required	Pre-Algebra
11th Year Math	1	Elective	
Music	12	Required	
Art	15	Required	
Biology	3	Elective Science	
General Science	7	Required	
Chorus	2	Elective	
Shop	5	Elective	
English-Reading	29	Required	
French	2	Elective	
World Regions	8	Required	
World History	1	Required	
Economics	2	Required	
Leadership Training	2	Recommendation	

The study of the students' native culture is part of a broader curriculum of area studies which covers Latin America. Additionally, the native culture is studied in Spanish language and literature courses. The study of culture is complemented by cultural activities held throughout the year for varied national groups to mark special occasions, and through personal interaction with program staff who are of the same ethnocultural origin as the students. Bilingual students' native cultures are not studied in mainstream social studies classes. The focus of those courses, according to reports, rests on mastery of basic facts and figures related to particular areas of the world, rather than on the study of cultures and lifestyles.

The program has established links with Hostos Community College. Students are given assignments by their social studies teachers which necessitate the use of the library at Hostos. During the summer months, Hostos has also made reading labs available to program students. A link has also been established with Lehman College for an advanced placement course in Spanish to be offered at Taft for three college credits.

V. NON-INSTRUCTIONAL COMPONENT

CURRICULUM AND MATERIALS

The curriculum followed by Project Adelante conforms with the regulations established by the New York City Board of Education and the guidelines set by the New York State Education Department. An American culture curriculum is in the process of being developed by program staff. Based upon the identified needs of the program's students, it is intended to present American culture in a comparative perspective. Additionally, the program has adopted an algebra curriculum developed by another New York City Title VII program, the Comprehensive High School Bilingual Program.

As mentioned above, students use materials published in Spanish in the subject areas taught in that language. Spanish publications are available in the school library, to which the program has contributed 130 volumes, primarily books of Spanish and Latin American literature. Reference books are also available for teachers and staff. It is reported, however, that materials are not sufficient to meet the diverse needs of students in certain areas, such as mathematics, in which students' needs vary greatly.

SUPPORTIVE SERVICES

All program students receive supportive services from program staff as well as school staff responsible for personal and academic guidance, home visits, and career counseling.

Guidance services are provided by two bilingual guidance counselors. Each student must see a counselor at least once a year for programming purposes. The family assistant complements the services of the counselors by providing orientation sessions. Students and staff

report, however, that guidance services are predominantly related to academic matters and that there is a need for more personal counseling. Students often develop personal attachments to program staff and teachers in order to satisfy this need.

The family assistant has visited the homes of most program students. During the early months of the school year, teachers submitted a list of students and the family worker visited them. When the number of visits became overwhelming, the process was revised so that the homes of those students in greatest need were visited. As the major academic and personal problems were alleviated, the family worker visited homes to inform parents of the program and to attract them to its activities.

Home visiting services are considered effective in helping to solve students' personal and school problems, as well as creating a closer relationship between the school and the home. The factors cited as accounting for the success of this service are "caring, shaking the students up, and getting them to motivate themselves." Additionally, the program administrators' encouragement of student and parental participation through an open-door policy and cultural activities was identified as essential.

Career orientation is provided by the college advisor, the assistant director (who was formerly a college advisor), and outside agencies, such as Aspira. There are special orientation sessions offered both by the program and the school. College representatives are invited to speak on occupational opportunities and on various types of educational programs. The school principal suggests that more of these sessions should take place.

STAFF DEVELOPMENT

Staff development activities consisted of regularly scheduled department meetings, workshops, conferences, visits to other programs or resource centers, and college courses. Tables 11, 12, and 13 outline staff development activities in school and outside the school for program staff and teachers.

Activities ranged from general orientation sessions through planning meetings and discussions, to college coursework in areas related to the program. Participation in activities varied according to purpose, location, and staff needs. There was a low level of teacher participation in in-service workshops and in college courses, despite the fact that few teachers have a license or degree in bilingual education. (See Table 14 for staff characteristics of teachers who serve program students.)

PARENTAL AND COMMUNITY INVOLVEMENT

Project Adelante has an advisory committee composed of parents, teachers, and students who volunteered their participation. The committee meets once a month; its functions include reviewing program implementation and, when necessary, advising modifications. However, in practice, the committee seldom makes recommendations and more often reacts to ideas presented to them.

The school's adult education program offers courses in Spanish for high school equivalency, E.S.L., and typing. Few parents of program students attend these classes; those who do, take E.S.L. Of the school-wide activities, parents are more attracted to the parent-teacher-student buffet dinner held during open school night, in which everyone brings food to share, and the Pan American Day festivities. Among the

Table 11. Staff development activities in school.

STRATEGY	DESCRIPTION(S) OR TITLE(S)	NO AND TITLE OF STAFF ATTENDING	SPEAKER OR PRESENTER (IF APPLICABLE)	FREQUENCY OR NUMBER OF SESSIONS, DATES		GOAL
Dept. meetings	Title VII Staff Meeting	All Title VII Staff	NA	Monthly		To discuss plans, activities ideas and problems.
	Foreign Language	All department members	Dana S. Fishkin, Director C. Sonnessa, Ass't Dir.	Monthly		To present Project Adelante up-date.
Workshops	Bilingual Soc. Stud.	5 (Chairman, 2 tea., Director & Ass't. Dir.)	C. Sonnessa	2	11/21, 11/24	To determine curricular textbook and materials needs
	Bilingual Math.	4 (Chairman, 1 tea., Director & Ass't. Dir.)	C. Sonnessa	2	11/1, 12/15	To determine curricular textbook and materials needs
	Bilingual Science	4 (Chairman, 1 tea., Director & Ass't. Dir.)	C. Sonnessa	2	12/2, 12/16	To determine curricular textbook and materials needs
Other Demonstration lessons, Lectures, etc.	Meetings with various book publ.	2 (Director and Assistant Director)	Book company representatives	4	3/9, 3/10, 3/12, 4/15	To learn about available publications in bilingual subject areas suitable for student needs.

Table 12. Staff development activities outside school.

STRATEGY	DESCRIPTION(S) OR TITLE(S)	SPONSOR/LOCATION	SPEAKER OR PRESENTER (IF APPLICABLE)	NO. AND TITLES OF STAFF ATTENDING	NUMBER OR FREQUENCY OF SESSIONS	DATES
Workshops held outside school	Title VII Workshop	Board of Education O.B.E.	Oswaldo Malave	2 (Director, Assistant Director)	1	11/3
	Consent Decree Workshop	Board of Education	Awilda Orta	2 (Assistant Director, Resource Teacher)	3	1/7, 1/8, 10/10
Conferences and symposia	Discussion of materials available through Bilingual Training Resource Center	Comprehensive High School Bilingual Program	Antonio Valle	1 (Assistant Director)	1	12/2
Visits to Other Title VII Programs	ERMI Conference in Washington, D.C.	Lesley College	Various ed. leaders	1 (Director)	Several	3/23 - 25
	Orientation re: procedures	Stevenson High School	Alfred Riccardi	2 (Director and Assistant Director)	2	10/22, 5/4
	Orientaton re: procedures	Monroe High School	Reyes Irizarry	2 (Director and Assistant Director)	1	12/5
	Orientation re: procedures	Roosevelt High School	Carmen Miranda	2 (Director and Assistant Director)	2	10/22, 2/24
Visits to local	Plan College Component	Hostos Community College	Dean Matthews et. al.	2 (Director and Assistant Director)	3	12/16, 2/9, 4/1
	Plan College Component	Lehman College	Louis Chary et. al.	2 (Director and Assistant Director)	2	1/4, 1/28
Visits to E.S.L. Central Office	Investigation of materials and texts	E.S.L. Central Office	Richard Quintanilla	2 (Director and Assistant Director)	3	1/9, 2/12, 2/16

Table 13. University courses attended by staff.

STAFF	INSTITUTION	GOAL	FREQUENCY	COURSES
C. Graciano, Bilingual Social Studies Teacher	New York University	Master's Degree	2 hours/week 3 hours/week	Independent Study Social Studies Rdgs.
H. Colon, Bilingual Resource Teacher	Lehman College	Master's Degree	3 hours/week 3 hours/week	ESC 703 School & Community ESC 709 Workshop Disruptive Behavior
School Secretary Bilingual	Lehman College	Bachelor's Degree	3 hours/week 4 hours/week	History of Puerto Rico II Theory Secretarial Work
W. Medina, Bilingual Educational Assistant	Bronx Community College	Bachelor's Degree	3 hours/week 3 hours/week	History 39 Puerto Rico History Mathematics 21 Req. Mathematics
L. Martinez, Bilingual Educational Assistant	Bronx Community College	Bachelor's Degree	3 hours/week	History 31 Latin American History

Table 14. Staff characteristics: professional staff supported by non-Title VII funds.

FUNCTION(S)	PERCENT OF TIME SPENT IN EACH FUNCTION	DATE ASSIGNED TO EACH FUNCTION	EDUCATION (DEGREES)	CERTIFICATION	LANGUAGE(S) USED	YEARS OF EXPERIENCE (OTHER SCHOOL)	YEARS OF EXPERIENCE (ESL SCHOOL)	YEARS OF EXPERIENCE (ESL)
Bil. Soc. Stud. Teacher	60	9/72	B.A. Lib. Arts M.A. Education	N.Y.C. N.Y.S.	Soc. Stud.-HS Bil. Span.-HS	7	4	--
Math Teacher	100	10/80	M.A. Spanish	N.Y.S.	Span.- HS	5	1	--
Bil. Science Teacher	20	9/79	M.A. Physics	N.Y.C. N.Y.S.	Physics & Gen. Science	18	3	--
Bil. Science Teacher	40	2/81	B.A. and M.A. Spanish	N.Y.C.	Span. - HS	9	6½	--
Reading & N.L.A Teacher	100	10/81	B.A., M.A. and Ph.D Cawk. Sp.	N.Y.C. N.Y.S.	Span. - HS Prn. - HS	15	2	1½
A.P. For. Lang.	100	2/58	B.S. and M.A. Education	N.Y.C. N.Y.S.	A.P. Super-vision For.L.		29	29
N.L.A. Teacher	100	9/63	B.S. Gen Sci. M.A. Edu./Couns.	N.Y.S.	Span.-JHS B.S.Bil-JHS		17	--
N.L.A. Teacher	40	9/66	B.A.,M.A. Span. M.A. Education	N.Y.C. N.Y.S.	Span.-HS E.S.L.-HS		15	4
Bil.Rdg. & N.L.A. Teacher	100	2/81	B.A., M.A. Education	N.Y.C. N.Y.S.	Span.-HS		3½	
Bil. Guidance Counselor	100	11/75	B.A., M.A. Guidance	N.Y.S.	Spanish JHS Guidance JHS		10	--
Bil. Guidance Counselor	100	2/58 2/74	B.A., M.A., M.S.	N.Y.C. N.Y.S.	Sp.CR - JHS Sp. - HS		22	--
					Guid.& Adm. Cert.- HS			
E.S.L. Teacher	100	9/72	M.A. Education	N.Y.C.	Span - HS	11½	5	½
E.S.L. Teacher	100	9/61	B.A. English M.A. Education	N.Y.C. N.Y.S.	T. E.S.L.	(20) 11 HS E.S.L.	11	11
Bil. Soc. Stud. Teacher	40	9/80	B.A., M.A. Education	N.Y.C.	Bil. Soc.Stu. Span.-HS	1	5	5

factors said to discourage parent participation are work and family conditions, as well as parents' values. Staff members noted that most parents do not consider parents' meetings to be important. Parents are most likely to attend events at which their children, their country, and culture are recognized and celebrated. The program is working toward bolstering parents' attendance at activities, and toward involving them more in their advisory function in program direction.

GENERAL INDICATORS OF SELF-CONCEPT

Program students manifest attitudes toward self in their interaction with peers and program staff. In the academic realm, students generally express the view that low grades are acceptable because they are deserved; this attitude has been manifested by students who are thought capable of better academic performance. In the ethnocultural realm, students generally demonstrate feelings of security and enthusiasm; they express the desire to participate actively in program events. Involvement in such activities reflects pride in their "group belongingness."

The program is presently attempting to raise students' levels of aspiration and expectations through curricular and extracurricular activities. Students take part in a leadership training club, and a leadership club in physical education; many have applied to the honor societies for which approximately 20 students are now eligible.

Three out of four scholarships of the United Federation of Teachers were awarded to program students. These scholarships are awarded on the basis of achievement and need. Forty students, (18 percent of program participants) were awarded certificates for excellent attendance. Most graduating students plan to attend city colleges. Approximately 30 percent of the students in the program (mostly boys) hold afterschool

and summer jobs. There were only two suspensions during the school year, both involved students who are New York-born Puerto Ricans. Students of the latter group were reported to be the most frequently suspended of all program students. However, in comparison to the school population, program students in general have a better record of behavior. Vandalism, said to be a problem in the school, has never been a problem with the program students.

Students' participation and involvement in activities they initiate would suggest a positive self-concept. Their view of low grades as "deserved" may reflect a sense of not having worked sufficiently rather than of lacking ability.

An examination of the post-high school plans of the twelfth-grade students reveals the following:

Table 15. Post-high school plans of twelfth-grade students.

PLANS	NUMBER	PERCENT
College	13	65%
Vocational or Career Training School	3	15%
Job	1	5%
Armed Forces	1	5%
Undecided	2	10%
TOTAL	20	100%

- The great majority of the bilingual program seniors (80 percent) plan to attend college (13 students) or to seek additional vocational or career training (3 students).
- Another five percent desire full-time employment after graduation.

VI. FINDINGS

ASSESSMENT PROCEDURES, INSTRUMENTS, AND FINDINGS

The following section presents the assessment instruments and procedures, and the results of the testing to evaluate student achievement in 1980-1981.

Students were assessed in English language development, growth in their mastery of their native language, mathematics, social studies, and science. The following are the areas assessed and the instruments used:

English as a second language -- CREST (Criterion Referenced English Syntax Test, Levels I, II, III)

Reading in Spanish -- Interamerican Series, Prueba de Lectura (Total Reading, Level 3, Forms CE, DE)

Mathematics performance -- Teacher-made tests

Science performance -- Teacher-made tests

Social studies performance -- Teacher-made tests

Attendance -- School and program records

The following analyses were performed:

1) On pre/post standardized tests of Spanish reading achievement statistical and educational significance are reported:

Statistical significance was determined through the application of the correlated t-test model. This statistical analysis demonstrates whether the difference between pre-test and post-test mean scores is larger than would be expected by chance variation alone; i.e. is statistically significant.

This analysis does not represent an estimate of how students would have performed in the absence of the program. No such estimate could be made because of the inapplicability of test norms for this population, and the unavailability of an appropriate comparison group.

Educational significance was determined for each grade level by calculating an "effect size" based on observed summary statistics using the procedure recommended by Cohen[1].

An effect size for the correlated t-test model is an estimate of the difference between pre-test and post-test means expressed in standard deviation units freed of the influence of sample size. It became desirable to establish such an estimate because substantial differences that do exist frequently fail to reach statistical significance if the number of observations for each unit of statistical analysis is small. Similarly, statistically significant differences often are not educationally meaningful.

Thus, statistical and educational significance permit a more meaningful appraisal of project outcomes. As a rule of thumb, the following effect size indices are recommended by Cohen as guides to interpreting educational significance (ES):

a difference of 1/5 = .20 = small ES

a difference of 1/2 = .50 = medium ES

a difference of 4/5 = .80 = large ES

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[1]Jacob Cohen. Statistical Power Analysis for the Behavioral Sciences (Revised Edition). New York: Academic Press, 1977 Chapter 2.

2) The instrument used to measure growth in English language was the Criterion Referenced English Syntax Test (CREST), which tests mastery of specific skills at three levels. Material at the beginning and intermediate levels of the CREST is broken down into 25 objectives per level, such as present-tense forms of the verb "to be" (Level I), or possessive adjectives and pronouns (Level II). Material at the advanced level (Level III) is organized into 15 objectives, such as reflexive pronouns. At each level, students are asked to complete four multiple-choice items for each objective. An item consists of a sentence frame for which the student must supply a word or phrase chosen from four possibilities. Mastery of a skill objective is determined by a student's ability to answer at least three out of four items correctly.

This report provides information on the average number of objectives mastered, and the average number of objectives mastered per month of treatment, by students who received Title I or non-Title I E.S.L. instruction. Information is also provided on students' performance at the various test levels.

For Title I E.S.L. students, performance breakdowns are reported in two ways: First, a grade and level breakdown of objectives mastered at pre- and post-testings and the average gain is reported. Second, results for the combined sample are reported for the average number of objectives mastered at pre- and post-testings, and the average number of objectives mastered per month of treatment.

Mastery rates in subject-area classes are reported by semester (in terms of the percentage of students passing classes). As uniform examinations were not available for all subject-area classes, comparisons with the performance of English dominant students could not be made.

Instruction (treatment) time is defined as the period of classroom instruction that occurred between pre- and post-testing which is conducted each semester. The maximum treatment time, as defined, is 62 days for fall and 63 days for spring or 3.2 months (assuming that 20 days comprise one month, on the average).

Non-Title I E.S.L. students were tested only in spring. All students reported functioned on the advanced level (III) only. Performance is reported for the average number of objectives mastered between pre- and post-testings and the average number of objectives mastered per month of treatment. The maximum treatment for non-Title I students was 4.5 months.

3) The results of the criterion referenced tests in mathematics, social studies, and science are reported in terms of the number and percent of students passing teacher-developed tests. Results are reported by grade level and the language of instruction. Data on the achievement of mainstream students in content-area classes were not available. As a result no comparisons will be made.

4) Information is provided on the attendance rate of students participating in the bilingual program compared with that of the total school population.

The following pages present student achievement in tabular form.

Table 16. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level.

(E.S.L. Title I Spanish-speaking students, fall)

	LEVEL I				LEVEL II				LEVEL III			
		Average Number of Objectives Mastered				Average Number of Objectives Mastered				Average Number of Objectives Mastered		
Grade	N	Pre	Post	Gain*	N	Pre	Post	Gain*	N	Pre	Post	Gain*
9	25	7.4	11.4	4.0	7	11.3	15.4	4.6	20	7.6	10.1	2.5
10	26	6.7	12.0	5.3	3	11.0	13.3	2.3	7	7.0	10.0	3.0
11	10	10.1	16.1	6.0	7	9.6	14.3	4.7	16	8.2	10.9	2.7
12	5	8.8	13.8	5.0	7	12.3	16.3	4.0	5	7.4	11.0	3.6
TOTAL	66	7.7	12.5	4.8	24	11.2	15.4	4.2	48	7.7	10.4	2.7

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

- Sixty-two percent of enrolled students were pre- and post-tested in the fall.
- Lower grade students functioned primarily on lower test levels and upper grade students tended to function at upper test levels.
- Students tested with Level I showed the largest growth.

Table 17. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students, fall)

Grade	# of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
9	52	8.0	11.5	3.5	2.6	1.3
10	36	7.1	11.7	4.6	2.8	1.6
11	33	9.1	13.2	4.1	2.9	1.4
12	17	10.1	14.2	4.1	2.9	1.4
TOTAL	138	8.3	12.3	4.0	2.8	1.4

*Post-test minus pre-test.

- The total group gained an average of 4.0 objectives in 2.8 months of instructional treatment.
- The total group mastered 1.4 objectives per month of instruction.
- Students at all grade levels made impressive gains.

Table 18. Performance of students tested on the Criterion Referenced English Syntax Test (CREST): average number of objectives mastered by grade and test level

(E.S.L. Title I Spanish-speaking students, spring)

	LEVEL I				LEVEL II				LEVEL III			
		Average Number of Objectives Mastered				Average Number of Objectives Mastered				Average Number of Objectives Mastered		
Grade	N	Pre	Post	Gain*	N	Pre	Post	Gain*	N	Pre	Post	Gain*
9	29	9.9	13.5	3.6	5	9.8	13.2	3.4	4	7.5	9.5	2.0
10	25	9.5	13.0	3.5	NO DATA				5	9.4	12.4	3.0
11	7	15.0	19.0	4.0	8	10.9	13.9	3.0	13	8.0	10.8	2.8
12	2	10.5	15.0	4.5	3	11.7	17.7	6.0	9	9.1	12.2	3.1
TOTAL	63	10.3	14.0	3.7	16	10.0	14.4	4.4	31	8.5	11.3	2.8

NOTE: number of objectives for each level: Level I (25), Level II (25), Level III (15).

*Post-test minus pre-test.

.Fifty-three percent of enrolled students were pre- and post-tested in the spring.

.The numbers of students tested at Levels II and III declined in the spring from the fall rates.

.Students in lower grades functioned primarily on lower test levels and students in upper grades functioned on upper test levels.

.Upper grade students generally showed larger gains than lower grade students.

Table 19. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. Title I Spanish-speaking students, spring).

Grade	# of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
9	38	9.6	13.0	3.4	2.8	1.2
10	30	9.5	12.9	3.4	2.9	1.2
11	28	10.2	13.7	3.5	2.8	1.2
12	14	9.9	13.8	3.9	2.9	1.3
TOTAL	110	9.8	13.3	3.5	2.8	1.2

*Post-test minus pre-test.

- The total group gained an average of 3.5 objectives in 2.8 months of instructional treatment.
- The total group mastered 1.2 objectives per month of instruction.
- Upper grade students mastered slightly more objectives than lower grade students.

Table 20. Results of the Criterion Referenced English Syntax Test (CREST): number of objectives mastered, and objectives mastered per month.

(E.S.L. non-Title I Spanish-speaking students, spring, Level III)

Grade	# of Students	Average Number of Objectives Mastered Pre	Post	Objectives Mastered*	Average Months of Treatment	Objectives Mastered Per Month
9	7	8.0	11.9	3.9	3.3	1.2
10	7	11.6	14.1	2.5	3.7	.7
11	7	9.9	12.6	2.7	4.1	.7
TOTAL	21	9.8	12.9	3.1	3.7	.8

*Post-test minus pre-test.

NOTE: Maximum number of objectives is 15.

- Nine percent of enrolled students were tested in spring in E.S.L. non-Title I classes.
- The total group gained an average of 3.1 objectives.
- The total group mastered an average of .8 objectives for every month of instruction.
- Ninth graders showed the largest gains.
- The total group's post-test mastery level (12.9 objectives) represents 87 percent of the total number of Level III objectives.
- Tenth graders, especially, had achieved almost all the instructional objectives at pre-test. This tended to truncate the growth which they could demonstrate on this test, and depressed the results.

Table 21. Native language reading achievement for Spanish-speaking students.

Significance of mean total raw score differences between initial and final test scores in native language reading achievement of students with full instructional treatment on the Prueba de Lectura (total reading), Level III, forms LE and DE.

Grade	N	Pre-test Mean	Pre-test Standard Deviation	Post-test Mean	Post-test Standard Deviation	Mean Difference	Corr. Pre/post	t	p	ES
9	59	45.9	18.5	54.6	19.3	8.7	.87	6.80	.001	.89
10	43	60.3	18.9	66.9	16.9	6.6	.78	3.55	.001	.54
11	36	65.3	15.1	71.1	14.2	5.8	.78	3.52	.001	.59
12	18	59.9	12.7	68.8	10.0	8.9	.89	6.26	.001	1.48

- All grades demonstrated statistically and educationally significant gains.
- Students who scored lower on the pre-test appear to have made the largest gains.

Table 22. Number and percent of students passing teacher-made examinations in mathematics.

(Courses conducted in English)

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	19	17	90%	18	11	61%
10	12	6	50%	13	7	54%
11	6	6	100%	6	2	33%
TOTAL	37	29	78%	37	20	54%

- The overall pass rate in fall was 78 percent.
- The overall pass rate in spring was 54 percent.
- The pass rates were generally higher in the fall but the number of students reported is small in both terms. As a result, the percentages should be interpreted with caution.

Table 23. Number and percent of students passing teacher-made examinations in mathematics.

(Courses conducted in Spanish)

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	49	37	76%	60	38	63%
10	47	31	66%	43	27	63%
11	27	16	59%	32	22	69%
12	11	6	55%	10	10	100%
TOTAL	134	90	67%	145	97	67%

- The overall pass rates in fall and spring were 67 percent.
- Ninth and tenth graders achieved at higher rates in fall than in spring.
- Eleventh and twelfth graders achieved at higher rates in spring than in fall.
- Students tended to demonstrate higher rates of success in mathematics courses conducted in Spanish than in English.

Table 24. Number and percent of students passing teacher-made examinations in science.

(Courses conducted in English)

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	6	4	67%	8	4	50%
10	6	4	67%	8	5	63%
11	3	3	100%	3	2	67%
TOTAL	15	11	73%	19	11	58%

- The overall pass rate in fall was 73 percent.
- The overall pass rate in spring was 58 percent.
- The success rate was higher in fall.
- The numbers of students reported were very small. As a result, a small change in the number of students passing may appear as a large percentage difference. Therefore, the percentages of students passing should be interpreted with caution.

Table 25. Number and percent of students passing teacher-made examinations in science.

(Courses conducted in Spanish)

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	13	11	85%	45	31	69%
10	15	12	80%	15	11	73%
11	13	11	85%	7	6	86%
12	5	5	100%	6	4	67%
TOTAL	46	39	85%	73	52	71%

- The overall pass rate in fall was 85 percent.
- The overall pass rate in spring was 71 percent.
- The pass rate was generally higher in fall.
- Students tended to achieve higher success rates in science courses conducted in Spanish than in English.

Table 26. Number and percent of students passing teacher-made examinations in social studies.

(Courses conducted in English)

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	19	8	42%	16	10	62%
10	13	9	69%	11	8	73%
11	4	2	50%	5	3	60%
12	1	1	100%		NO DATA	
TOTAL	37	20	54%	32	21	66%

- The overall pass rate in fall was 54 percent.
- The overall pass rate in spring was 66 percent.
- The rates of passing were consistently higher in spring.
- Relatively few students were reported as having taken social studies classes in English.

Table 27. Number and percent of students passing teacher-made examinations in social studies.

(Courses conducted in Spanish)

	FALL 1980			SPRING 1981		
Grade	N	Number Passing	Percent Passing	N	Number Passing	Percent Passing
9	45	35	78%	62	51	82%
10	42	29	69%	39	29	74%
11	26	26	100%	34	22	65%
12	16	11	69%	11	10	91%
TOTAL	129	101	78%	146	112	76%

.The overall pass rate in fall was 78 percent.

.The overall pass rate in spring was 76 percent.

Table 28. Significance of the difference between attendance percentages of program students and the attendance percentage of the school.

Average School-Wide Attendance Percentage: 58.4%

Grade	N	Mean Percentage	Standard Deviation	Percentage Difference	t	p
9	70	79.4	14.2	21.0	12.37	.001
10	61	83.7	11.3	25.3	17.49	.001
11	42	93.1	6.5	34.7	34.60	.001
12	19	93.6	5.0	35.2	30.69	.001
TOTAL	192	85.2	12.6	26.8	29.47	.001

- The overall attendance rate of program students (85.2 percent) exceeded the average school-wide rate (58.4 percent) by a highly statistically significant margin.
- The attendance rate in each grade exceeds the school-wide rate by a highly significant margin.
- Upper grade students showed higher attendance rates.
- Lower grade students showed greater variability in attendance.
- Motivation for program participation appears to be high.

VII. CONCLUSIONS AND RECOMMENDATIONS

CONCLUSIONS

The goals and objectives of Project Adelante have been realistically set considering the degree to which they have been achieved in its first year of operation. The program has provided bilingual instructional and supportive services to 225 Hispanic students of limited English proficiency from grades 9 to 12, considering their family socioeconomic backgrounds, and their ethnocultural, linguistic, and academic characteristics. Primary emphasis has been placed on completion of courses required for high school graduation, to prepare students for post-secondary education and/or better possibilities for employment. The program philosophy is of a transitional bilingualism type, that is, students are mainstreamed to English only classes as soon as possible.

The instructional offerings appear to be satisfactory, in general, and in E.S.L. and Spanish, in particular. However, while language instruction per se is an outstanding feature of the program, review and planning are necessary in order to meet student needs in subject matter, language development through content-area instruction, and coverage of native culture. Such planning and subsequent implementation require organizational arrangements for supervision and training of teachers. Personnel are highly competent, motivated, and interested in the students they serve. However, program needs and the lack of personnel available have resulted in the assignment of teaching responsibilities to four teachers in areas outside their specialization. This situation calls for a systematically planned and implemented staff development component.

Program students demonstrated success in meeting the program's objectives for achievement in reading in English and Spanish. On the whole, students generally achieved rates of passing in their content-area courses which exceeded 65 percent. The least consistent overall passing rates were achieved in mathematics.

In the subject areas however, particularly in science and social studies, students experienced the greatest successes in the courses in which Spanish was the medium of instruction. This pattern may be due to a placement process which selected different types of students for participation in bilingual and mainstream courses.

As was discussed earlier, some students (particularly the United States-born) have sufficient skills to participate in mainstream classes, but because of linguistic difficulties and their limited cognitive development are placed in remedial classes in which they may experience only limited success. Other students (particularly the immigrants) have stronger linguistic and cognitive skills in Spanish, and perform successfully in the higher level courses taught in the native language in which they enroll.

The differential rates of mastery in the content-area courses taught in English and Spanish may also be exaggerated by the small numbers of students who are reported as having taken courses in the mainstream. Because of the limited number of students reported, a shift of relatively few students may result in a large percentage difference in the outcomes reported. As a result, these outcomes must be interpreted with caution.

Nevertheless, it appears that mathematics is an area in which students do experience some difficulty. This may reflect both weaknesses

in the development of basic skills and concepts, and/or a lack of appropriate instructional materials.

In the area of supportive services, efforts are being made to improve this component further. Students exhibit the need to relate to bilingual guidance counselors within the program itself. Materials developed or purchased are found to be satisfactory, except, as discussed, in the subject of mathematics. In this subject, the broad spectrum of students' ability requires a range of Spanish-language mathematics texts, presently unavailable.

In other areas of program implementation, parental involvement in the school and program is increasing and encouragement of greater parent participation is continuous. Students' enthusiasm, satisfaction, and achievement are all indicators of program success.

Project Adelante is kept "healthy" by all those who are contributing to its development. Movement in the direction signified by the program's title is evident.

RECOMMENDATIONS

Given the constraints of a program review consisting of four full-day visits in which the school principal, assistant principals, program director and staff, teachers, students, and parents were interviewed; three classes were observed; relevant documents and student achievement data were analyzed and interpreted, the following recommendations are made on the basis of professional judgment as determined by the program evaluator in consultation with O.E.E. staff.

1. Given the high level of development of the Spanish and English language programs, attention should be focused on the other part of

the instructional component, the subject areas. A collaborative process involving chairpersons, program director and teachers, the advisory committee, and whatever outside resources are available should be undertaken to review, revise, and plan systematically:

-- how Spanish and English are to be used to teach content while simultaneously developing both languages;

-- how advanced academic courses can be made available to bilingual students, not highly proficient in English, when bilingual personnel is not available/certified to teach those courses;

-- how the curricula taught are to be similar to and vary from the curricula taught in the mainstream;

-- how the student's native culture is covered by and related to the broader social studies curriculum. A more thorough coverage of the Caribbean and Latin America may complement, rather than substitute, what is presently offered in the study of eastern and western civilizations.

2. The process of planning a comprehensive bilingual instructional program and formulating implementation strategies must be preceded by an assessment of teachers' training needs and followed by in-service training workshops and college coursework. These workshops and courses should encompass the major areas of teachers' professional development needs related to bilingualism, ethnicity, class, and culture in education.

3. Planning and implementation of subject-area instruction and staff development require a process of teacher observation and observer feedback. This process should be conducted by the program administrators who are responsible for program implementation and outcomes.

At present, in New York City schools, only department chairpersons are authorized and have the responsibility to supervise teachers. Thus, the planning and implementation recommended for instruction

and staff development require either special arrangements within the existing organizational structure or a change. The program director may work in conjunction with the department chairperson in the observation of and feedback to teachers. Alternatively, the possibility of creating a bilingual education department or a "mini school" may be considered, particularly if the program continues to expand.

4. All possible resources available for counseling (personal, academic, occupational) should be explored. Municipal, state, and federally funded service agencies as well as public and private colleges may be contacted. Although these services are provided to program students, the demand for them is so great that continuous expansion in their provision is necessary.

5. Given the need for mathematics materials in Spanish, the program should explore the availability of mathematics texts of varied levels of complexity written in Spanish. It is necessary that such texts be acquired in order to avoid the need to lecture in Spanish while using texts written in English. This would seem to be doubly important in light of the difficulties experienced by some project students in mathematics classes.

6. Given the more erratic success rates of students in mainstream content-area classes, it is recommended that the program staff examine the characteristics of these students and the courses of instruction in which they are participating. As these are mainstream classes, they may or may not address the particular linguistic and cognitive needs of bilingual students. Upon analysis, it might be productive for program staff members to collaborate with mainstream classroom

teachers to disseminate or develop methods and materials, within the existing course structures, to better meet the needs of those students.

7. It is recommended that the program make an effort to obtain evaluation data as proposed on the achievement of mainstream students in their content-area classes for comparison with the achievement of bilingual students in parallel courses taught in Spanish. If the comparison cannot be made because of the unavailability of uniform examinations, then the evaluation objective for the content areas should be revised, and other more appropriate objectives set.
8. It is reported that parents are still intimidated by the school. It is necessary to investigate further what factors lead parents to feel comfortable communicating with school staff. It is suggested that similarity of language and cultural background as well as degree of personalism in the nature of the relationship established be explored as possible factors influencing the rate of parental participation.